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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/712,530	11/14/2003	Shigeo Komatsu	Q78179	8673

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EXAMINER

MARTIN, ANGELA J

ART UNIT	PAPER NUMBER
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1745

DATE MAILED: 02/08/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/712,530

Applicant(s)

KOMATSU ET AL.

Examiner

Angela J. Martin

Art Unit

1745

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 November 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 10-13 and 34-37 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 10-13 and 34-37 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>11/03; 7/04</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 10-13 are rejected under 35 U.S.C. 102(b) as being anticipated by Sonozaki et al., U.S. Pat. No. 6,106,973.

Rejection of claims 10-13 drawn to a nonaqueous secondary electrolytic battery.

Sonozaki et al., teach a nonaqueous secondary electrolytic battery (col. 4, lines 11-16) comprising an electricity-generating element having a positive electrode plate and a negative electrode plate opposed to each other with a separating material interposed (col. 4, lines 3-10) and lead terminals electrically connected to the electrode plates (col. 2, lines 24-28); and a battery case made of a resin sheet having welded portions in which overlapped portions of the resin sheet are sealed together (col. 4, lines 38-49), the lead terminals extending through one of the welded portions (abstract), wherein the thickness of one of the portions is greater at an inner end than at an outer end (Fig. 7, ref. 44). It teaches a positive plate and negative plate are wound about a winding axis since the structure may be wound (col. 8, lines 46-60), such that the element has an ellipsoidal cross-sectional shape (Fig. 19), and the winding axis is

Art Unit: 1745

perpendicular to one of the welded portions (col. 2, lines 14-21). It teaches the resin sheet is a metal-laminated film comprising metal foil and resin layer (col. 4, lines 45-49).

Thus, the claims are anticipated.

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 10-13 are rejected under 35 U.S.C. 102(e) as being anticipated by Hatta et al., U.S. Pat. No. 6,797,430 B1.

Rejection of claims 10-13 drawn to a nonaqueous secondary electrolytic battery.

Hatta et al., teach a nonaqueous secondary electrolytic battery comprising an electricity-generating element having a positive electrode plate and a negative electrode plate opposed to each other with a separating material interposed (col. 9, lines 49-63) and lead terminals electrically connected to the electrode plates (col. 2, lines 25-45); and a battery case made of a resin sheet (col. 4, lines 30-38) having welded portions in which overlapped portions of the resin sheet are sealed together (col. 13, lines 43-51), the lead terminals extending through one of the welded portions (abstract), wherein the thickness of one of the portions is greater at an inner end than at an outer end (col. 2, lines 46-53). It teaches a positive plate and negative plate are wound about a winding

axis since the structure may be wound (col. 9, lines 49-55). It teaches the resin sheet is a metal-laminated film comprising metal foil and resin layer (col. 4, lines 30-33).

Thus, the claims are anticipated.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 34, 35, and 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hatazawa et al., U.S. Pat. No. 6,428,934 B1.

Rejection of claims 34, 35, and 37 drawn to a nonaqueous secondary electrolytic battery.

Hatazawa et al., teach a nonaqueous secondary electrolytic battery (abstract) comprising an electricity-generating element having a positive electrode plate and a negative electrode plate opposed to each other with a separating material interposed and lead terminals electrically connected to the electrode plates (col. 2, lines 39-55); and a battery case made of a resin sheet (abstract) having welded portions in which overlapped portions of the resin sheet are sealed together (Fig. 2), the lead terminals extending through one of the welded portions (abstract), wherein the terminals are each bent (col. 7, lines 18-21). It teaches a bent portion of the terminals is covered by a resin

Art Unit: 1745

layer (Fig. 1). It teaches the resin layer is a partially extended portion of the resin sheet (Fig. 2).

Thus, the invention as a whole would have been obvious to one of ordinary skill in the art at the time the invention was made because although the prior art of record does not teach the terminals are bent at a radius of from 0.5-4mm, it would have been obvious to one of ordinary skill to bend the terminals for an optimum fit, since it has been held that the provision of adjustability, where needed, involves only routine skill in the art. *In re Stevens*, 101 USPQ 284 (CCPA 1954).

7. Claim 36 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hatazawa et al., U.S. Pat. No. 6,428,934 B1, in view of Hatta et al., U.S. Pat. No. 6,797,430 B1.

Rejection of claim 36 drawn to a nonaqueous secondary electrolytic battery.

Hatazawa et al., teach a nonaqueous secondary electrolytic battery as described above.

Hatazawa et al., do not teach the resin layer is a resin tube of material that is different from the material of the battery case.

Hatta et al., teach the resin layer is a resin tube of material that is different from the material of the battery case (col. 6, lines 61-67 and col. 7, lines 1-23).

Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to insert the teachings of Hatta et al., into the teachings of Hatazawa et al., because Hatta et al., teach that when the "heat welding process is performed, the surface portion...of the sealant resin 6 must be melted. Moreover, the

Art Unit: 1745

resin materials...which must be combined with each other are required not to be melted and fluidized in any case." (col. 6, lines 60-65). Therefore, having different materials for the battery case and the resin tube would be advantageous for the heat welding and so that "the shape stability of the resin can be obtained (col. 7, lines 14-15).

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Austin et al., U.S. Pat. No. 4,997,732, teach a laminated battery which is heat-sealed. Cheu, U.S. Pat. No. 6,042,966, teach a laminated battery container with folded edges.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Angela J. Martin whose telephone number is 571-272-1288. The examiner can normally be reached on Monday-Friday from 9:00 am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Ryan can be reached on 571-272-1292. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1745

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


AJM